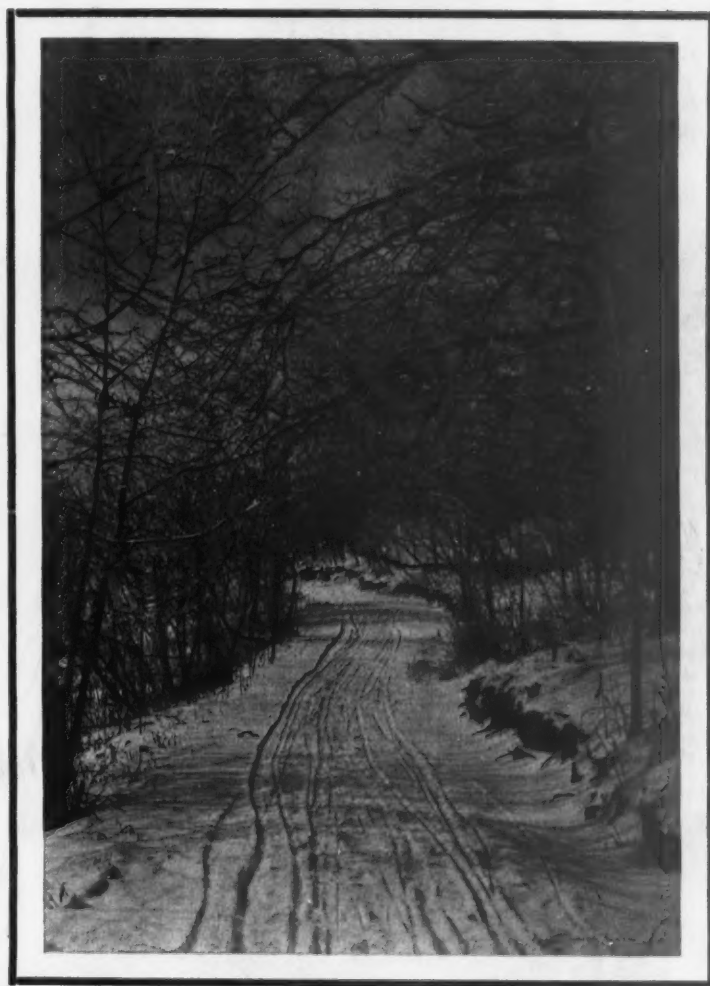


The Cornell Countryman

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INSTITUTE



DECEMBER

Volume XXI

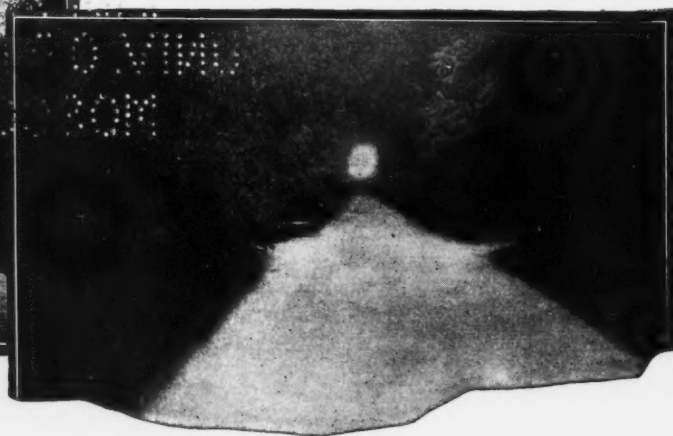
1923

Number 3

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Contents and Contributors

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Daniel P. Witter, represented Tioga County in the Assembly during the years 1896-1900 and 1916-1923, and has been elected for the fourteenth term. He has been chairman of the committee on internal affairs two years, electricity, gas and water supply two years, and agriculture five years. For about twenty years Mr. Witter was employed by the State Department of Agriculture as a conductor of farmers' institutes in the winter time, and for the past five years he has been employed at the State College of Agriculture at Ithaca during the fall months, to assist in the arrangement of programs for farmers' institutes which are now being conducted as a part of the regular extension work of the college. Mr. Witter owns a large farm at Berkshire, N. Y., where he resides.

The Value of Roughage..... 80

Elmer S. Savage needs slight introduction to Cornellians, and particularly those of us who have taken courses in the animal husbandry department. Although absent last year on sabbatic leave to the

University of Wisconsin, he has for many years been identified with the study of feeds in the animal husbandry department, and this fall, in conjunction with Dr. L. A. Maynard of the same department, published a book on the general subject of feeding. Professor Savage was prominently interested in the National Dairy Show held at Syracuse in October.

Vacuum Cleaners 82

By Miss Ruth M. Kellogg, of the Cornell University School of Home Economics. Miss Kellogg is an instructor in Household Management, and a graduate of the Kansas State Agricultural College. Having also done work at both the University of Chicago and Columbia University, she is well qualified to handle the subject of household machinery. She is a previous contributor to this magazine on another topic of interest to housewives, and we are glad to welcome her again to our pages.

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Blow ye snows of old December
Drifting drifting down
Blow ye leaves of hale November
Drifting sere and brown,
All the years that I remember
With the snow come down.

—Liberty Hyde Bailey

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXI

DECEMBER, 1923

Number 3

How the State's Business is Done at Albany

By D. P. Witter

BY request I have written the following article on legislative procedure in the state of New York. So far as I know, it is the first written statement on this subject.

My legislative experience has all been in the Assembly and I shall write mainly in regard to my work in that branch of the legislature, although as a rule the same procedure is followed in both houses. There has been much improvement in the interest of justice and fair play in the method of conducting the business of the Assembly since my first term in 1896.

The Constitution of the state of New York provides that "the Legislature shall, every year, assemble on the first Wednesday in January." The rules of both Senate and Assembly provide that the organization shall be at noon of that day, and a caucus of the two leading parties shall be held on the evening before, at 8 o'clock, for the purpose of nominating candidates for the several offices. The Assembly is called to order by the clerk of the preceding year and he presides until a speaker has been elected. If any members have not taken the constitutional oath of office, they are required to do so at that time. Then follows the election of officers. The minority party always nominates one of their number for speaker, who, after his defeat for that office, becomes the floor leader of the minority during the session. The majority leader is appointed by the speaker.

After the message from the Governor has been read by the clerk, the seat drawing begins. A committee consisting of one each of the majority and minority parties has previously been appointed by the speaker to prepare the names of the members in the following manner:

The names of all persons who have served five years or more are placed in one group, the names of the four-year men in another group, and so on down each year to the freshmen, of whom there are usually between forty and fifty, they also forming a group. The majority leader takes his seat first and the minority leader second, on op-

posite sides of the center aisle. The chairman of the Ways and Means Committee, the first committee of the house, takes his seat next to the majority leader. The members' names are called in the order of their length of service. As the name of a member is called he chooses his seat out of all those not taken. On account of my long

service, I have been permitted to choose seat forty-one, next to the chairman of Ways and Means, for several years. The location of a member in the chamber during the session measures to quite an extent his influence in that body, from the fact that the seats near the leaders on both sides of the chamber are taken by the members longest in service. Most of the new members must be located in the back seats where they can neither hear nor be heard in debate. I have many times felt sorry for the men who must stand back of the rail for two hours or more and await their turn to have their names called. The appearance of the faces of those men would indicate they had aged about ten years during that short period.

During my early experience as a member, all of the names were put in one box and the committee would draw a name. If it was that of a new member or of one whom they did not care to favor, his name was returned to the box and another drawn. Sometimes in the early part of the drawing

this was repeated several times before a name was announced. After watching that favoritism go on for an hour or two, the members whose names had not been called would sometimes get quite angry.

After the seats have all been allotted, adjournment is usually taken for one week or until the next Monday night to give the speaker time to make up the committees. There are over thirty committees in the Assembly with usually thirteen members on each committee. Upon the make-up of the various committees depends the efficiency and dispatch with which the work of the session is performed to a very great extent. Nearly all of the members have assignments on three committees. For the speaker to as-



sign each member on the committees for which his life work has best fitted him is no small task. The minority leader recommends to the speaker the assignments of the minority members. They form the minority on all committees. Of course the new and minority members are named last on all committees, the old members taking first places.

Some years ago, the chairman of the Ways and Means Committee was also the majority floor leader, which added materially to his work, a job impossible for one man to perform while making up the enormous budget of the present time. The system now used is a great improvement over that of former years. The majority and minority leaders of the Assembly are made members ex-officio of all committees. This permits them to visit all committees in their work and know quite definitely what is being done by them. This is especially true when important hearings are being held.

From ten days to two weeks before final adjournment all committees in the Assembly are discharged and the calendar is made up each day by the Committee on Rules. The speaker is always chairman of this committee. The other members are the majority and minority leaders and members of long service from both parties. Considerable criticism has been made of this system sometimes, and not without reason. Last year the number comprising this committee was increased from seven to eleven, which made it more representative of the whole group, and no complaint followed. I am of the opinion that some such system is necessary to best close up the work of the session, and if the work is honestly done I see no objection to it.

Preparation of Bills

After a bill has been deposited in the bill-box the name of the committee to which it is referred is placed on it by the speaker and is read by the clerk when the bill has its first reading. The reading of a bill is supposed to be completed when the clerk reads the title of the bill and the last section. Any member has the right to ask that the entire bill be read, but that is very seldom done. That bill then becomes the property of the committee to which it has been referred and it remains such until the committee reports the same back to the Assembly for its consideration, unless the committee is discharged by a vote of the house. This is seldom done for the reason that such action is a reflection not only on the committee which has considered the bill but the speaker who appointed the committee. If there is opposition to a bill and a hearing is called for, such hearing is granted. All interested parties are notified by letter and publications. After the hearing the room is cleared of all persons except members of the committee and clerk, and they go into executive session to consider the merits of the bill.

It is in the committee-room where the important part of legislation is performed. If a member moves a bill in committee, a roll call is had and a record kept of the vote of each member. If seven or more affirmative votes are cast for the bill, it is prepared for the report to be handed up by the chairman of that committee at the next session of the Assembly. The roll call is attached to the bill and thereby becomes the property of the house. A committee may amend a bill or present a substitute bill to the house, but this is not usually done without first having a conference with the introducer in fairness to him.

If the bill has been printed in final form three or more days, it may come before the Assembly for a second reading. If there is no objection to the bill in its present form, it is advanced to third reading without debate. A bill may be amended by the house on second reading. If a

member does not understand the provisions of a bill and desires more time for its study, an agreement is usually made with the introducer to postpone action until such person may have an opportunity to confer with him or others on its provisions. If a bill seems vicious, a motion is sometimes made to report it back to the committee. If that motion is carried, the bill is killed.

When a bill has been advanced to a third reading by the house, it is then engraved and placed in a jacket. It must then remain on the desks of the members three legislative days when it can come on the third reading calendar for final passage. No bill can be taken from a committee, killed, or passed without a majority vote of all of the members elected to the Assembly, seventy-six in number. If a bill carries an appropriation, ninety votes are required to pass it.

Budgeting the State's Millions

It may be interesting to many to know how the budget of over a hundred and fifty millions is made up and acted on by the Legislature. When the expenses of the state increased to such great proportions, it became necessary to provide some other method of making the annual appropriation bill beside the one then in vogue, which was to have it prepared by the Committee on Finance in the Senate and the Ways and Means Committee in the Assembly during the session of Legislature. It was usually passed under an emergency message by the Governor on the day of adjournment without being printed, which the Constitution permits, only a very few members of either house knowing anything of its contents except possibly the total amount. Under the present system the procedure is as follows:

Both the Finance and Ways and Means Committees have a clerk on an annual salary. They, with the chairman of each committee, visit the various departments and State institutions during the summer months and learn their needs as far as possible at first hand. From this information and consultation during the winter months with those in charge of such institutions, they prepare a budget. Beside this, there has been created by law a board of estimate and control, composed of the Governor, the state comptroller, who is the state auditing officer, and an accountant who is appointed by the Governor. This board also prepares a state budget, which by conference is usually made to harmonize with that prepared by the Legislature.

Under the present law this appropriation bill or budget must be ready for introduction in both houses on or before March 15 each year. After the bill has been printed and reported by the committees it is placed on the order of second reading. Unlike other bills, it must remain on order of second reading five legislative days, being read every day, before it can be advanced to third reading. During that time it is of course subject to amendment. After all of this procedure it is placed on third reading calendar and passed by both houses. It then goes to the Governor. He cannot then increase the appropriation, but he may veto any items and the remainder of the bill becomes law.

Under the present system the rights and interests of all are as well protected as it is possible under any budget system yet devised.

The Thirty-day Bill

Many people do not understand what makes a bill a ten-day bill or a thirty-day bill. After a bill is passed by the Assembly it is signed by the speaker and sent by messenger to the Senate, where it is usually referred to a committee and goes through about the same procedure as it has in the Assembly. After passage by the Senate, it is

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signed by the Lieutenant-Governor and returned to the Assembly and from there it is sent to the Governor. After it has been received by the Governor he has ten days to either sign or veto the bill. After ten days from the date of final adjournment as fixed by concurrent resolution of both houses, the Governor has thirty days in which to sign bills. If a bill is not satisfactory to the Governor, he many times will notify the introducer, and if he desires to amend the bill to make it satisfactory, he can introduce a resolution asking for the recall of the bill and after that has passed both houses the bill is again in the possession of the house where it originated. It is then amended, reprinted, and in proper time is repassed by both houses and goes to the Governor for his signature.

Voting by Roll-call

During my first legislation period of five years, it was always the custom for the clerk to call every one of the one hundred and fifty names on the passage of all bills. I have known a reader who became so proficient in that work that he would read the title of the bill, also the last section, call all of the names, and announce the result in less than one minute. During the past few years, it has been the custom for the clerk to read the name of only three members and if there was no response the bill was declared passed, usually by one hundred and thirty "ayes"—no "noes." The names on roll call are always called in alphabetical order. The three names called on short roll call are those of the two floor leaders and my own, on account of my name coming so near the end of the list. Sometimes, if no one desires a slow roll call but a few wish to be recorded against a bill, the members who so desire stand or hold up their hand and the clerk records them as voting "no" on the bill. If a single member desires a slow call and asks for it, the name of every member must be called and that slow enough so any one can be recorded as he desires. Every member, when his name is called, has three minutes in which he may explain his votes if he desires to do so.

Honor Among Assemblymen

The rights of every member, no matter what his politics, are fully protected by the rules of the Assembly, which, to my knowledge, have never been abridged. I have known hundreds of bills to which no one objected passed at a faster rate than one a minute and I have known hours to be required to pass a bill after the roll call commenced. One outstanding feature in the Assembly, at which most strangers are surprised, is the absolute fairness with which the members treat each other. Men may fight, and fight hard, but if one member should attempt to take any undue advantage of another in the passage or defeat of a bill he would at once incur the wrath and displeasure of every other member of the house. If a member had a bill that was objectionable to the house, or a bill to which any member had serious objections, such bill would not be acted upon in their absence if the conditions were known to the other members, but a postponement would be had until the member in question was present. I have known many bills to be passed in the absence of a member, for whom, when he came in and made his objections known, the bill would be recalled by resolution and, after he had gone on record against or for the bill, as the case might be, the Assembly would likely take the same action as before.

It is an annual occurrence for the newspapers to criticize the Legislature for being so slow in getting full calendars and finally for the terrible rush with which business is done during the closing days of the session. They scarcely realize the length of time it must take to get the organization of the Assembly perfected with the necessary

clerks and stenographers to do business. Besides this delay it should be remembered that the bills which come on the calendars early in the session are bills to which there is no opposition and they pass quickly on short roll call without debate. Hearings are held in committees on all bills which are being opposed and it takes several weeks before that type of bills can be made ready for final passage. The rush at the close of the session could and should be avoided. The reason for it is that the date of final adjournment has been set by concurrent resolution and sufficient allowance is not made for the great accumulation of business which usually comes at that time. One year recently I had only thirteen hours of sleep during the last four days of the session and the last nineteen hours I did not have any food. My presence was called for at my seat during that time. That year I heard Speaker Sweet say he had only six hours sleep during the last four days. Men are scarcely able to do good work under such conditions.

Passing the Bill

The method of passing bills may be well illustrated by following the progress of one or two which have recently been enacted into law:

I introduced the bill which merged the College of Agriculture and the State Experiment Station on February 26. It was referred to the Committee on Agriculture. After considerable time and not hearing of any opposition the bill was favorably reported by the Committee and came on order of second reading. At that time a hearing was called for. I made request on the floor of the house that the bill be referred back to the Committee. The hearing was arranged for and the opposition notified. After the hearing, the bill was reported unanimously by the Committee again, and following the regular order passed the Assembly with only one vote in opposition. It was sent to the Senate, referred to the Committee on Agriculture, a hearing was again asked for and granted. It was some time after the hearing before it was reported by the Senate Committee. It did not reach the order of final passage in the Senate until the day of final adjournment, late in the afternoon, May 4. The bill received only fourteen affirmative votes, twelve short of the required number to pass it. It may be classed as "life's darkest moment" to put in days and weeks on a favorite bill, secure its passage in the Assembly, and have it completely fail in the Senate at the last moment. This often occurs without any apparent good reason. To add to my discomfort the Assembly was all day and night under a close call of the house and I could not go to the Senate. However, my sorrow was turned into joy in this case when I learned that the Senate had reconsidered its vote and brought the bill up again for passage, at which time it received the required twenty-six votes. A hearing was called for before the Governor by the opponents of the bill, but before the day set for the hearing the request was withdrawn. The bill was signed by Governor Smith and became a law. It was evident that some powerful influence had been at work which caused so many members of the Senate to reverse themselves in so short a time. That sometimes happens.

Rough Times in the Chamber

I have seen such disorder amounting almost to riot in the Assembly during my early experience that members had to be placed under arrest and brought before the bar of the house for such punishment as the members saw fit to pronounce. This was especially true in 1896 when the Raines Liquor Tax Law was passed, and the next year when this law was amended. The same was true when the Ford Franchise Tax Law was passed in

1899. It was the night before final adjournment. The speaker realized by the tumult that serious results were likely to occur. He gave a signal to the majority leader who moved "that the Assembly do now adjourn until the next day." The motion was at once put by the speaker and declared carried. He took his gavel and left the chair, going quickly into his room. We were adjourned without many knowing just what had happened. The next day the same bill was passed without serious difficulty. There were some who contended the bill was not in proper form to be of any value, while others made the charge that the opposition had been influenced by the corporations they were seeking to tax. This charge was of course strongly resented by many members, hence the tumult. This was during the time when Roosevelt was governor. Before the thirty days expired in which the Governor had to sign the bill he had found the wording of the bill was such that it was not workable. He called the Legislature back for an extra session and informed the members that he would not sign the bill as it was if they did not amend it so it could be administered. This was done at once and the bill became law. Under its provisions millions of dollars have been paid into the state treasury every year.

The night before final adjournment in 1896, some members in the minority in the Assembly undertook to defeat the passage of a bill by noise. During the roll call a member from New York stood and yelled, "Mr. Speaker! Mr. Speaker!" so loudly that the clerk could not be heard. He was demanding recognition by the speaker, which is against the rules during roll call. The speaker was

pounding the desk with his gavel and demanding order. He finally ordered the arrest of the member violating the rules of the house. As the sergeant-at-arms attempted to make the arrest several of the minority members surrounded their friend so the officer could not reach him. At this moment a member of the majority stood and yelled, "Mr. Speaker! We are with you to enforce the rules of this house." At once every member was on his feet. The person yielded to arrest and was brought before the bar of the house for punishment. After considerable debate it was agreed that the speaker should reprimand the prisoner and that he be permitted to take his seat. After the reprimand, which was a severe one, and the prisoner was discharged, he shook his fist at the speaker and said:

"Sir, you are the one who ought to be under arrest!"

During my second period as member of Assembly, consisting of eight years, the floor leaders have been extremely just and tolerant. The influence of such treatment and example has been good and the result has been that men have overcome their sharp differences without serious bitterness or trouble.

Members of the Legislature are quite like the persons who elect them, in most cases neither better nor worse. Some, while in Albany, live a righteous life as they do at home, and there is some evidence that a few do otherwise. I am confident, however, that in nearly all cases the members try to carry out the wishes of their constituents as they understand them and honestly endeavor to so vote on all bills that the best interests of the people they represent will be served.

The Value of Roughage

By E. S. Savage

The newer work in the studies of the mineral requirements of animals and in the vitamin requirements are giving us a much greater appreciation of the value of roughage. Up to the present time, most of us on our farms have tried to get large yields of roughage, and then in our feeding practices we have been content to use up the roughages on hand, and in the winter have not planned as we should to get better roughages for the next winter's feeding.

The value of roughage is increased in three ways; first, by an increase in the protein content; second, by an increased amount per acre secured by proper cutting and curing; and third, by a decrease in the amount of concentrates necessary when the roughage is of the right quality and quantity.

Heretofore, in using the roughage that we have had on the farm,—and on more than half the farms, it is rather poor—we have tried to bolster up our rations by feeding more grain and protein until I think farmers in the East have acquired a false idea

of protein and are feeding on a plane of concentrate consumption which is not economical.

When I fly in the face of general practice, which is to feed a large amount of high protein grain here in the East, I may be running up against something which will be rather hard to prove; but anyhow, I am going to make the argument. Dr. Warren says that when you find a large group of farmers persisting in doing a certain thing, then you should be very careful before advising a different practice. It is certainly true that a very large group of eastern farmers are feeding large amounts of high protein feeds and large amounts of grain in relation to the roughage. Since this is such a common practice with a large group, it may be wise practice. However, I cannot refrain from stating it as my judgment that in many cases, it will be found to be good economics to increase the quality and amount of roughage fed, decreasing first on the amount of grain and, second, on the percentage of protein in the grain.

In following out the order given

above, the first thought we have is that the value of roughage is increased when we increase the protein in it, because this allows us to feed less protein in the concentrates. Now, the way to increase the protein raised on our farms is to raise more legume hay, as legumes give us the most protein per acre. Perhaps popular opinion is carrying forward the increase in the growth of legumes as fast as our farmers can bring themselves to do these things. The object of this article is to increase the weight of that popular opinion and if possible bring about just a little faster the turning of our attention to more legumes.

The acreage of alfalfa in New York has increased 100% in the last ten years. Perhaps it is unnatural to hope it will increase faster than this, but it is certainly to be hoped that the increase in the acreage will come as fast as possible. The value of alfalfa hay compared with other crops is shown very quickly in a simple table taken from "Feeds and Feeding" by Henry and Morrison. This



ANOTHER ALFALFA FIELD. LEDGETOP FARM
Seeded early spring 1922. Yield one and one-half tons 1922. Four tons 1923

table is computed from the average returns for the whole country.

Average Returns Per Acre from Alfalfa and Other Crops

	Yield per acre Lbs.	Digestible Crude Protein Lbs.	Total Digestible Nutrients Lbs.
Alfalfa hay.....	4,372	463	2,250
Clover hay.....	2,624	199	1,336
Timothy hay.....	2,340	70	1,134
Corn (ears and stover).....	3,574	150	2,251

This table shows that the total digestible nutrients yielded per acre in alfalfa hay is nearly twice as much as that yielded in clover hay or timothy hay and equal to the yield of corn, considering both ears and stover.

The amount of digestible protein is three times as great from an acre of alfalfa hay as from an acre of corn silage; nearly seven times as great as the yield of digestible protein from timothy, and two-and-one-half times as great as the yield of digestible protein from clover. This shows in no uncertain terms that in going after alfalfa we are doing the right thing.

There is not room to give here the methods to be used in making an earnest effort to increase the amount of alfalfa on our farms. Directions for soil treatment to secure a good stand of alfalfa differ in the various localities and the advice of the soils and crop experts nearest you should be sought through your farm bureau agent in order to get the best results for your particular soil type. I do not believe that one should go after a stand of alfalfa in a haphazard way. There have been too many disappointments and too much money spent to get stands of alfalfa, to advise anyone to attempt the growth of alfalfa until he has exhausted all possible sources of help to get started right.

We are going to call attention to the results secured by J. Gelder in Essex County, to illustrate first the possible results that may be secured under favorable conditions, and second, to illustrate one method in a definite locality. In one of the illustrations accompanying this article, it will be noted that a very fine crop was secured on 25 acres this year. The method used here on this field as told to me recently was that Mr. Gelder was to summer fallow this land in 1922 and seed it to alfalfa in July with no nurse crop. Two tons of lime to the acre were put on this field and 800 lbs. of acid phosphate. Baltic alfalfa was used for seed and 10 lbs. per acre were sown. The Baltic seed is a type of Grimm alfalfa and was purchased from a seed house in Mitchell, South Dakota. The cost is about 60c. per pound.

The other illustration accompanying this article shows the 1923 yield on another field of the same farm in Essex County, New York. This field was seeded in a different manner from the field described above and as worked out by Mr. Gelder repre-

sents a different idea than any that I have heard of before. This field was fertilized with two tons of lime and 800 lbs. of acid phosphate to the acre and the alfalfa was sown as early as the ground could be worked in the spring of 1922. No nurse crop was used. The seed was sown with a VanBrunt grass seeder. This grass seeder has twenty discs four inches apart and Mr. Gelder emphasizes the fact that the alfalfa seed needs to be sown uniformly and not too deep when seeded so early in the spring. He used Baltic alfalfa in this second method of seeding. Mr. Gelder sowed 10 lbs. of this Baltic alfalfa to the acre on this field.

He believes that it is good practice to sow this alfalfa seed early in the spring with no nurse crop and he does it in this way and at this time in order to give the alfalfa the same start as the weeds and in his opinion and experience, if you give the alfalfa the same start as the weeds, use good seed and do not sow it too thickly, the alfalfa will stand its own with the weeds all right.

The yield on this field in 1922 was one-and-one-half tons to the acre. Only one cutting was made in 1922. The picture shows the first cutting in 1923. Three cuttings were made in 1923 and the yield was four tons of cured hay to the acre. The soil on this farm, as I understand it from Mr. Gelder, is a rather heavy clay loam, and the farm is located in Essex County, New York, so the climate may be judged of. Of course, the amount of lime and acid phosphate used on this field is more than ordinarily advised and the expense would be rather heavy from this point of view, but I think this is a very good example of what may be done, if one will start right in and do a really good job.



ALFALFA FIELD, LEDGETOP FARM, CROWN POINT, ESSEX COUNTY,
F. L. Porter, Owner. J. Gelder, Manager
This field summer fallowed 1922. Seeded July, 1922

Early Cutting and Curing Important

The mineral content of roughages, particularly in clover and alfalfa, is in the leaves. Also, the vitamins which make roughages of particular value to animals are also found in the leaves. Therefore, these roughages must be cut early and so cured as to save the leaves, if we are to increase the value of roughage by proper cutting and curing. The value of timothy hay and of the grasses other than timothy also is found to a considerable extent in the leaves. And it is true of all grasses as well as the legumes that the earlier the hay is cut, the higher percentage of protein there is in it. Therefore, early cutting is to be desired with all classes of roughage.

With alfalfa, the proper time of cutting is a little later than has been the rule up to this time. One rule that is now observed is to cut alfalfa when about one-fourth in bloom. With clover, the practice is to cut when the

plants are in full bloom and with timothy, the general farm practice is to cut right after the first bloom.

Experimental evidence shows that if these times of cutting are observed the yield per acre will be increased, particularly the yield of total digestible nutrients per acre. In New York particularly it has been my observation that farmers do not start haying early enough and are not observing very good practices in curing. Recent experiments have shown that the more hay can be excluded from the direct rays of the sun in curing the higher will be the vitamin content and the more leaves there will be saved.

Less Concentrates When Roughage Is of Good Quality

As a general practice, I think it will be found that ten per cent less grain will be needed on our eastern farms if the hay is of the proper quality and certainly it is true that

a twenty per cent protein grain mixture will be just exactly as good as a twenty-four per cent protein grain mixture assuming, of course, that the number of pounds of total digestible nutrients per ton is the same in each mixture. The premium that we have to pay for the four per cent more total protein in the twenty-four per cent protein grain mixture amounts to four dollars or more per ton, and in the future, as I foresee it, the margin that will have to be paid for high protein mixtures will be greater than in the past.

Therefore, it seems to me that good practice on dairy farms in the East must take into consideration plans for more and better roughage with particular pains taken to establish stands of alfalfa wherever that can be done. When this has been accomplished, I am sure that we will find that we will need to feed less grain and such grain as we do feed will be less expensive to buy.

Vacuum Cleaners

By Ruth M. Kellogg

DOES anyone who has ever had to drag a large rug out of doors and give it a thorough beating, remember the occasion with much joy? It immediately brings up visions of dust enveloping the worker, also aching muscles, to say nothing of an upset room and perhaps injury to the rug from improper beating. Now an ever-increasing number of households are living in greater comfort and cleanliness because of the vacuum cleaner. This piece of equipment, once almost a luxury, is fast coming to be considered one of the essentials in homes where there are carpets or any but diminutive rugs.

A good vacuum cleaner actually prolongs the life of a rug by removing not only surface dirt but also the imbedded grit and sand. It is this sand and grit that, if left, cuts the fiber and in this way wears out the rugs. Some people have questioned the cost of operation; this is very low as far as electricity is concerned, as the motor requires such a small amount of current; other costs are almost negligible providing a good machine has been purchased in the first place and is then given the right kind of care. A cleaner should be looked upon as a valuable investment yielding returns in greater cleanliness and health and making great saving in energy and time.

There are many good machines on the market now, almost a bewildering array. But all can be divided into one of three types according to the principles on which they are constructed. In all vacuum cleaners the actual removal of dirt is accomplished in one of these ways; by suction alone; by suction plus a friction or traction-driven brush; by suction plus a motor-driven brush. Those in the first group are easily recognized by the fact that there is no brush within the nozzle of the machine; if one is used at all, it is attached to the outside of the nozzle. However, these machines, having very strong

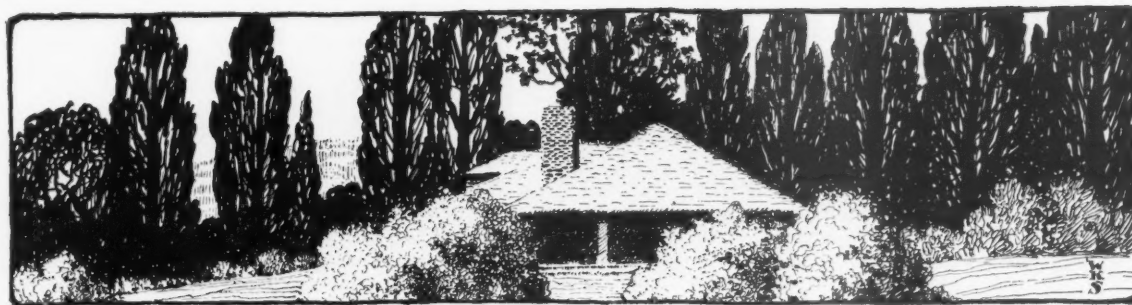
suction, are designed to be used without the brush, and the placing of the brush as above-mentioned greatly increases the friction between machine and rug, thus requiring more energy to push the machine. Also the nozzle is prevented from coming in close contact with the objects around which one is cleaning.

In the second group a brush, usually of bristles, is located within the nozzle. This brush revolves when the machine is pushed or pulled across the floor, either because of contact with the rug itself, or because of forming contact with the wheels of the cleaner. When contact is made in the latter way the brush is usually speeded up to revolve 3-5 times for each revolution of the wheels. In good machines of this group strong suction is obtained.

The third group depends upon the beating of the motor-driven brush to stir or dig up the dirt, and then sufficient suction to carry the dirt on into the dust bag. By one method or another the brush is geared down to make fewer revolutions per minute than the motor that drives it, as this motor is revolving at a high rate of speed.

For those of an inquiring frame of mind there are other interesting discoveries to be made. Examination of the interior of any of these cleaners shows a fan connected directly to the motor; the latter, revolving at a high rate of speed, gives a like number of revolutions to the fan. The revolutions per minute vary in different makes of machines, the variation ranging from 4,500 to 9,500 or 10,000. The rapid revolutions of the fan, creating a partial vacuum in the fan chamber, cause a large volume of air plus dirt and dust to be drawn in through the nozzle around the fan and propelled on into the dust bag. The air passes on through the bag, leaving the solid particles behind. It will be readily seen that allowing the dust bag

(Continued on page 89)



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Ithaca, New York

December, 1923

DECEMBER is here, and we have with us the new men in the short course. We are glad to welcome them, and to extend to them the privileges which we enjoy in the university and the college of agriculture. And as years roll by, and we see these men coming and going, we naturally are led to wonder what the real value of the course is to them, primarily, and in a lesser way, to our college of agriculture, and its teachers.

The man who really benefits most from the short course is the man who realizes the purpose of that course. He should realize that in such a brief period as twelve weeks, the best that any teacher can do is to introduce the subject at hand. Fortunately, the typical short course man comes with a real desire for learning, and to that end bends all of his efforts. It is for such men that the short course institution was founded, and these are the men who profit most from the course.

In general, the faculty of the college enjoy and profit by the short course, because they have a differently prepared group of students to deal with. Throughout the year the professor deals with a body of students who do not require a minutely detailed explanation of the subject, and who are sufficiently well informed on most subjects to make it unnecessary for light to be shed in the corners. It is conceivable that under such a regime, the teacher would tend to become just a bit careless of those details, in his attempt to bring out the bigger points. The short course man demands an answer to his question which is built up from the bottom in a clear, logical, and unmistakable

way. And it is under these conditions that the best teaching is done and real experience obtained. And again, the undesirable blasé attitude of many of the regular course men is entirely lacking in the short course men. Enthusiasm unfeigned, and a desire to 'make hay' is his characteristic attitude, and without doubt he accomplishes more during his stay here than do most of the regular students in the same length of time.

Our final verdict must be that the course in a big way is of value, and that its desired ends are being accomplished. The greater number of the short course men, unlike the regulars, return to the farm to put into practice their learning, and if for no other reason the short course should be fostered.

—G. B. W.

IF we were to judge from the number of Empire State farmers who have deliberately left the farm this past year and from the many gloomy articles appearing in the current rural newspapers, we would arrive at the conclusion that farming is a poor business and that the prosperous farmer is to be only a recollection. New York state farmers have not been nearly so hard hit by the depression as the western and mid-western farmers mainly because of protection by high freight rates.

A sure barometer of agricultural prosperity is the enrollment in agricultural colleges. The New York State College of Agriculture has practically the same enrollment this year as last, while some of the western universities have had a great decrease in their agricultural registration.

Looking over a period of years we find that farming is a prosperous business; has been in the past; and is bound to be in the future. If the farmer keeps faith and manages to tide over temporary depression he will succeed. Should he quit now and return at some future time to what was once his unprofitable farm, he will say regretfully, "I might have been the owner of this prosperous business."

Farming goes by ups and downs and in the long run all times are good times. A few years of depression may be compared to the loss of men in the World War. There were many killed but they represented only a small part of the human population and their loss will have little effect on the world's population when we consider a generation or more. Just as those of us who have lost a father, a son, or a brother still feel the loss, so must the farmer endure present hardships and make up for losses when prosperity comes.

—W. W. P.

THE immigration problem, like the poor, we have all ways with us. And, were immigration to cease today for a year, we would still have the problem. The trouble is that most immigrants remain immigrants, and until we can make our selections in Europe instead of at Ellis Island, we'll continue to have a stomach-ache from our undigested citizenry.



Former Student Notes

'77 B.S.—Dr. L. O. Howard has recently published an article in the annual report of the Smithsonian Institute for 1921. The title of his article is, "A Fifty Year Sketch History of Medical Entomology."

'82 B.S.—Frederick P. Suydam has changed his residence address to 312 West Seventy-eighth Street, New York. He is with the Hyde-Murphy Company, 280 Madison Avenue.

'85 B.S.—F. M. Chappell is farming at Port Byron.

'90 B.S.—Lee C. Corbett, horticulturist of the United States Department of Agriculture, recently talked to vegetable gardening enthusiasts in Barnes Hall.

'92 B.S.—Henry Hicks conducts a tree moving nursery at Westbury.

'01 B.S.—D. L. VanDine is assistant professor of extension entomology at Penn State University.

'06 B.S.—Professor Charles F. Shaw of the department of soil technology of the University of California, who recently returned from a six months' sabbatic leave spent in Honolulu, Australia, and New Zealand, writes us that the recent fire in Berkeley, California, destroyed his home and all of its contents with the exception of a small amount of silverware and a part of Mrs. Shaw's clothing. Mrs. Shaw received a rather severe but not a serious burn. Among the other Cornellians to meet losses in the fire were Walter Mulford, F. E. '99, now professor of forestry at the University of California and Dr. Herbert J. Webber, acting dean of the College of Agriculture, who was professor of plant breeding at Cornell for a number of years. All three of the Cornellians lost their personal libraries with their household effects.

'08 W.C.—C. R. Owens and H. Spink W.C. '20 are assisting with winter course instruction in the dairy department.

'09 B.S.—E. L. Baker, who for the past six years has been county agri-

John Lemuel Stone '74 was one of the first students to receive a B. S. A. degree from Cornell University. Following graduation, he returned to the family farm where he became influential in the agricultural development of the community, county and



state. In 1897, Professor Stone accepted, on special invitation from Dean Roberts, a position as assistant in extension teaching and in 1907 became a full professor of farm practice until the time of his retirement in February, 1919, when he was made Professor Emeritus. During the period of service to the college, Professor Stone successfully sponsored the pioneer enterprise of extension and also supervised the development and management of the university farm. His practical and administrative ability, excellence as a teacher, breadth of vision and personal ideals, places him among our agricultural leaders. Professor Stone is hale and hearty at the age of 71 and enjoys his days 'midst his University friends.

cultural agent of Genesee County, leaves on December 1 to take up additional studies. Previous to engaging in county agricultural work, Mr. Baker was employed as teacher of vocational agriculture. He leaves in Genesee County one of the finest extension organizations in the state.

'09 B.S.—E. L. D. Seymour is engaged in editorial work, writing, and journalism in horticultural and agricultural fields. At present, he is associate editor of *The Florists Exchange* and editor of *The Horticultural Annual of the Society of American Florists*. Besides editing many horticultural books and contributing to various journals, Mr. Seymour writes us that he enjoyed the Columbia game, and on the previous Saturday had the pleasure of hearing the reports of the Dartmouth game at the Cornell Club in New York, with Birge Kinne. Seymour's home is at 218 Hilton Avenue, Hempstead, where he indulges in a little actual farming on a one acre suburban lot.

'11 B.S.—Announcement has been made of the marriage of Grace Lucinda Bennett and Frank L. Landergren. Mrs. Landergren is manager of the Cornell Cafeteria, Inc., Newark, New Jersey.

'11 B.S.—Waldemar H. Fries left the Chase National Bank on August 15 to become associated with the investment house of Lewis and Snyder, 1427 Walnut Street, Philadelphia.

'11 B.S.—Edward M. Tuttle of East Moriches, professor of rural education from 1915-1918, is on the editorial staff of the *Rural New-Yorker* and is editing an encyclopedia for use in rural schools.

'12 B.S.—George H. Bissinger is with the Bissinger Hat Manufacturing Company, makers of men's hats, 175 Fifth Avenue, New York. He lives at 31 West Forty-ninth Street.

'12 B.S.—Stanley White is teaching landscape art in the University of Illinois at Urbana, Illinois.

'12 B.S.—George Butler is teaching agriculture at Camden, Delaware.

'12 B.S.—John Lloyd, who formerly instructed in entomology, is now head chemist for Lloyd Brothers, Manufacturing Pharmacists of Cinn. Mr. Lloyd's wife was Miss Olive N. Tuttle '15 B.S., who taught design in the University of St. Paul.

'12 M.S.—O. W. Dynes, formerly of the department of farm crops, is now associate professor of farm crops at the University of Tennessee at Knoxville, Tennessee. He has charge of field crops teaching and the field crop seed improvement work of the state.

'13 B.S.—H. Alger, who has recently been engaged in commercial dairy work, has been appointed instructor in the dairy department.

'13 B.S.—E. A. Brown, formerly of Sparks, Maryland, has resigned his position as secretary of the Baltimore Dairy Council to become a member of Thompson's Dairy in Washington, D. C. Other members of the dairy are A. L. Thompson '11 and F. E. Rogers '14.

'13 B.S.—L. W. Crittenden has resigned as county agricultural agent in Albany, to become director of the State School at Cobleskill. Mr. Crittenden succeeds H. B. Knapp, who becomes director of the Farmingdale School.

'13 B.S.—Elwyn H. Dole and Alice R. Olsen were married on August 14 in Fargo, North Dakota, and are living in Winnecook, Montana, where Dole is general manager of the Winnecook Ranch Company.

'13 B.S.—Horace M. Doyle is teaching vocational agriculture in the Wooster High School, Wooster, Ohio. Mr. Doyle has a 3-acre plot of land which he is planting to fruit.

'13 B.S.—Mr. and Mrs. Charles H. Elliot announce the birth of a daughter, Betty Jane, on June 17. Mrs. Elliot was formerly Marjorie Fox Reeve, Syracuse University '13. Mr. Elliot is a salesman for the Oneida Community, Limited, manufacturers of silverware, of Oneida; with headquarters at 1621 Boatmen's Bank Building, St. Louis, Missouri.

'13 B.S.—Mr. and Mrs. Leland N. Gibbs announce the arrival of Leland N. Gibbs, Jr., on September 27. "Lee" is with the Philadelphia office of the Sun Oil Company, and they live at 129 Linwood Avenue, Ardmore, Pennsylvania.

'13 B.S.—Cass Whitney has left the rural social organization department to study voice training in New York City.

'13 B.S.—C. B. Raymond, who has been county agricultural agent in

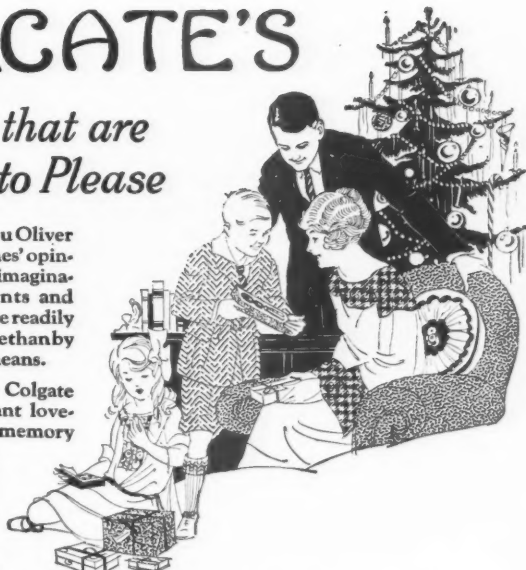
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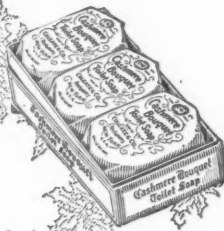
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Allegany County, leaves on December 1 to become county agricultural agent of Yates County.

'14 B.S.—C. P. (Chuck) Alexander has an assistant professorship at the Massachusetts Agricultural College at Amherst, Massachusetts.

'14 B.S.—T. A. Baker is profes-

sor of animal husbandry at the University of Delaware, Newark, Delaware.

'14 B.S.—Allen J. Frick is a member of the firm of Frick Brothers, Inc., distributors of "Brook French Polish" for autos. His address is 23 Flatbush Avenue, Brooklyn.



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ON every continent, the leading nations are those which make the greatest use of farm machinery. In every nation, the individual farmers who have the best machine equipment, and make the best use of it, rank as the leaders in their respective communities.

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'14 B.S.—G. S. Rose is with the Creamery Package Company with headquarters at Buffalo. "Gamie" is residing with his family at Rochester.

'14 B.S.—J. R. Teall is now managing the Buffalo plant of the Dairy-men's League. He was a member of the junior varsity crew in 1914.

'15 B.S.—F. E. "Hop" Hopkins is in Ithaca for the year studying vegetable storage problems under one of the biological fellowships of the Na-

tional Research Council. "Hop" lives at 104 Harvard Place.

'15 B.S.—T. B. Charles has given up instructing at Penn State and is now running his farm near Owego.

'15 B.S.—B. J. Koch very modestly informs us of our error made in the November issue stating that the Alden High School won first place in stock judging, at the National Dairy Show, for boys enrolled in secondary schools. Credit should

go to Perry High School and to their instructor, R. M. Leed, for placing New York State first.

'15 B.S.—A. S. Montague has tried examinations for admission to the bar in California. His new address is 932 S. Wilton Place, Los Angeles, California.

'15 B.S.—Daniel P. Morse, Jr., has changed his residence address to Kimball Avenue and Brook Road, Bronxville. His business address remains as before, Carlton Avenue, Brooklyn.

'15 B.S.—Charles H. Reader is now in the biological and chemical laboratories of the Roadem Mineral Fume Treatments at 382 State Street, Brooklyn. During the war he was engaged in biological work for the army.

'15 B.S.—A daughter, Priscilla, was born on September 24 to Mr. and Mrs. Arthur W. Wilson of Plainfield, New Jersey.

'15 B.S.—Paul Wing is in the sales and advertising department of the D. H. Burrell Co., who are manufacturers of equipment for the milk industry. Address him at 45 Alexander St., Little Falls.

'16 B.S.—Royal Gould Bird is doing forestry work at Forestport.

'16, '17 B.S.—An attractive double wedding took place in the Church of the Immaculate Conception in Ithaca on October 11 when Nora Elizabeth Conway became the bride of James J. Clynes, and her sister, Helen Marie Conway, became the bride of Francis L. Casey. Among the ushers were Hector B. Samson '21 of Scranton, Pennsylvania, and Bernard Clynes, '24, brother of James Clynes. Both couples will make their home in Ithaca.

'16 B.S.—G. Hale Harrison is treasurer and manager of sales of Harrison's Nurseries. His home is in Berlin, Maryland.

'16 B.S.—Leonard F. Hicks returned to New York City the middle of October from a business trip to Europe; he spent some four months in Scotland, England, France, Belgium, and Holland. He is vice-president of Daniel M. Hicks, Inc., dealers, importers, and packers of paper mill supplies, 200 Fifth Avenue, New York.

'16 B.S.—Birge W. Kinne and Miss Margaret Covell of Corvallis, Oregon, were married on October 27 at the First Presbyterian Church, New York City. Shortly after the ceremony they sailed for Bermuda on their honeymoon. Mrs. Kinne is a graduate of the Oregon Agricultural College while her father was graduated from Cornell '89 and is Dean of Engineering College at the Oregon

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Agricultural College. Birge was one time business manager of THE COUNTRYMAN, but is now more widely known as business manager of the *American Agriculturist*. The Kinne home will be 9 Patchen Place, New York City.

'16 B.S.—Mr. and Mrs. Lloyd E. Moore (Helen Irish) of Amsterdam, announce the birth of a son, Lloyd E., Jr., on July 10.

'16 W.C.—Ward B. Stark is owner and operator of a 290-acre farm at Mohegan Lake near Peekskill. About 40 acres of the farm is muck land and is used for the growing of celery, lettuce and melons. Aside from a ten-acre apple orchard, the remainder of the upland is cropped. Twelve regular men are employed with extra day help in the rush season to do the work necessitated by such a farm.

'17 B.S.—Elbert E. Conklin, Jr., is with the bureau of agricultural economics of the United States Department of Agriculture, Washington, D. C.

'17 B.S.; '22 B.S.—June C. Deming and Arthur K. Mills were married on August 4 and are living in Lombard, Illinois.

'17 B.S.—H. J. Evans of Mineola, Long Island, is connected with the Niagara Sprayer Co. of Middleport.

'17 B.S.—Marshall Farnham is now in charge of the Philadelphia Country Club golf course. His address is c/o Philadelphia Country Club, Philadelphia, Pennsylvania.

'17 B.S.—O. C. Krum, who has been in Oregon since 1921, has been transferred to the Colorado State Agricultural College at Fort Collins, Colorado, where he is extension specialist for the state. Mr. Krum was formerly an instructor in the poultry department at Cornell and was superintendent of the game farm for about a year.

'17 B.S.—H. A. Meyers is now located in Middletown, Orange County, where he has the agency for the Hudson and Essex motor cars.

'18 B.S.—Frederick H. Alfke continues as branch manager of the House of Henry Claus and Company, bankers, in their new office at 253 Broadway, New York. His residence address is 1 West Seventy-second Street, New York.

'18, '20 B.S.—Charles Baumeister and his brother, Philip Baumeister, have opened a real estate office at 11-17 East Forty-fifth Street, New York City.

'18 B.S.—Grace H. Griswold is an instructor in the department of entomology of the College of Agriculture.

To a Recent Graduate

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'19 B.S.—A son, Paul Menoher, was born on October 11 to Dr. and Mrs. Carl F. Howe (Virginia Phipps '19) of Ithaca.

'19 B.S.—Norman T. Newton has gone to Italy to begin his studies in the American Academy in Rome. His address is Academia Americana, Porta San Pancrazio, Rome.

'19 B.S.—Mr. and Mrs. J. L. Buys announce the arrival of Marilyn Jean, October 30, 1923. Mr. Buys is now head of the biology department at St. Lawrence University.

'19 B.S.—C. J. (Heinie) Schmidt is in the purebred Holstein game and has just made a rather good record of twenty-five pounds of butter in a seven-day test on Ormsby Sensation Abbecker, a two-year-old daughter of Ormsby Sensation. Heinie expects great things of the daughters of Sensation in the near future.

'19 B.S., '20 D.V.M.—A daughter was born on October 7 to Dr. and Mrs.

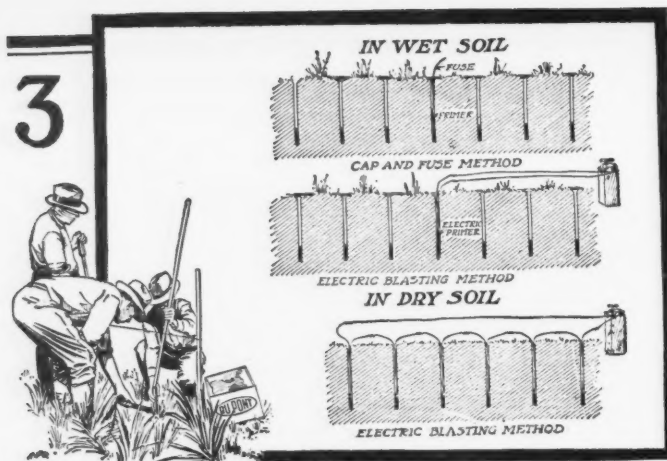
Hadley C. Stephenson, 404 University Avenue, Ithaca.

'19 B.S.—Walter B. Balch underwent an operation for appendicitis on September 30. He spent two months' vacation touring the East, returning to his home in Manhattan, Kansas, on September 29.

'19 B.S.—Bernard Bellis, for the past four years research chemist in the Dry Milk Company research laboratory at Adams, recently resigned his position with that organization to enter the retail drug business with his brother, E. S. Bellis. He is living at 55 Clinton Place, New York City.

'19 Ex.—Mr. and Mrs. Donald F. Calkins announce the arrival of Donald F. Calkins, Jr., on October 26.

'19 B.S., '21 M.S.—Mr. and Mrs. John L. Buys announce the arrival of Marilyn Jean on October 30. Mr. Buys, formerly of the University of Akron, has resigned to become professor of biology and head of the depart-



Priming and Loading Dynamite

AFTER holes have been properly driven, load the dynamite in them, pushing it down to the bottom of the hole with a tamping stick. In wet soil, water will rise in the holes and serve as tamping to confine the charge, but in dry soil the hole should be firmly tamped with dirt. Ditches two feet deep and three feet wide can be blasted with a half-cartridge per hole. Larger ditches need loads of one or more cartridges, according to size of ditch desired.

Only one cartridge need be primed—the central one. This is fired either by cap and fuse or by electric blasting cap and blasting machine. The shock of this explosion fires the charges in all other holes, blasting the ditch in one operation. From 200 to 400 feet of ditch can be blasted with a single shot.

50% or 60% Straight Dynamite is the only low-freezing explosive sufficiently sensitive to be used in this propagation method at any time.

Where the soil is wet, the propagation method of firing is most economical.

When the soil is dry the propagation method cannot be used. Each charge must be primed with an electric blasting cap. The cap wires are then connected in a closed circuit with an electric blasting machine which explodes all the charges at the same instant.

Du Pont Dumorite is the most economical explosive for this method.

We shall be glad to send any student or graduate, free upon request, a copy of the "Farmers' Handbook of Explosives" containing full information on the use of explosives for all kinds of agricultural work.

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ment of biology in St. Lawrence University, Canton. He and Mrs. Buys (Kathryn Slingerland '19) and little Miss Buys are living at 15 Harrison Street, Canton.

'20 B.S.—W. F. Baldwin was transferred to Duluth, Minnesota, as superintendent of the Blue Valley Creamery Company's plant there. "Baldy" was formerly with the same concern in Chicago.

'20 B.S.—F. M. Fronda, head of the poultry department in the College of Agriculture, University of the Philippines, Los Banos, P. I., writes: "You may be interested to hear that I am already married. I married just a few months ago and this explains my apparent silence during the last few months."

'20 B.S.—H. Evelyn Hendryx is director of girls' work in the Part Time School in Newburgh. Her address is 90 Beacon St.

'20 B.S.—Lucy Maltby is teaching home economics in the Corning Academy.

'20 B.S.—Francis "Blondy" Oates who was managing a Dairymen's League plant at Liberty has gone into the real estate and insurance business at Binghamton. His address is 61 Lincoln Ave.

'20 B.S.—Ruby Odell is assistant dietitian in the Rochester General Hospital.

'20 B.S.—H. C. Pierce is president of the Farmer's Union Creamery Association of Maysville, Kentucky, which is a co-operative association selling dairy products from over 4,000 producers. Mr. Pierce specialized in poultry husbandry while in college and was for many years in the bureau of chemistry, United States Department of Agriculture in Washington, D. C., investigating methods of preservation and transportation of poultry and eggs.

'20 B.S.—Edwin M. Prellwitz and Eunice Browning, both of Peconic, Long Island, were married last June, and they are now living at 208 Winthrop Road, Brookline, Massachusetts. Prellwitz is a landscape architect with Olmsted Brothers, of Brookline.

'20—Austin Robson is engaged in the selling of feed produce in Hall.

'21 B.S.—Gladys Williams and Frank Quinlin, were married July 7, at the bride's home in California. They made the trip to their new home in Poughkeepsie by automobile. Mr. Quinlin is engaged in newspaper work in Poughkeepsie.

'21 B.S.—Lillian F. Brotherhood is teaching science and floriculture in the National Park Seminary, Forest Glen, Maryland.

'21 B.S., '23 M.A.—Hempstead Castle is teaching botany in the New Haven High School, New Haven, Connecticut. His address is 367 Elm Street, New Haven.

'21 B.S.—Hilda Goltz of Buffalo

is assistant biochemist at the State Institute for the study of malignant diseases.

'21 B.S.—Philip D. Rupert is the food products inspector for the bureau of agricultural economics, United States Department of Agriculture, and is now stationed at Martinsburg, West Virginia.

'21 B.S.—Craig Sanford has charge of the New York office of the Quaker Oats Company. He was specialist for the poultry department of Orange County for a year before accepting his present position.

'21 B.S.—Alfred A. Whitehead is physical instructor and coach of football, rifle, and baseball at the DeWitt Clinton High School, 59th Street and Tenth Avenue, New York City.

'22 B.S.—Henry G. C. Hamaan is with the Pacific Egg Producers Association in New York, of which Dr. E. W. Benjamin, formerly professor in the poultry department, is in charge.

'23 B.S.—J. F. Larrabee is in charge of the rose growing establishment of C. V. Hike, Cortland.

'23 B.S.—Stephen T. Stanton is teaching agriculture in South Dayton.

Vacuum Cleaners

(Continued from page 82)

to become at all filled with dirt cuts down on the free passage of air through it; in other words, the amount and velocity of air current is decreased; meaning lessened suction. Yet how many people let the dust bag contain a considerable accumulation of dirt and then wonder why the machine seems to have such poor suction! A clean brush in a brush machine is also an essential.

The terms a salesman uses are sometimes confusing to a woman. For instance, such terms as a "universal" or a "vertical" or a "horizontal" motor often mean little to her at first. The last two terms refer simply to the position of the motor on the machine, whether it is upright or lying down. There are points in favor of each, but there need be no question as to serviceability or durability of either in a good machine. "Universal" motor is one that can be operated either on a direct or alternating current. Of course, as is true with any electrical device, the voltage must be correct for the current on which it is to be operated.

Any woman knows that a good length of nozzle, other things being equal, means fewer trips across the rug, as a wider section can be cleaned each time. But it is always wise to look at the under side of the nozzle as sometimes the actual length is less than the apparent because of the position of the wheels, or because a part of the nozzle is practically closed off.

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has a big advantage over the self-educated one in that he has learned feed values thoroughly before being obliged to risk a cent on uncertain feeds.

At college you have been taught, or will be taught, the milk-making properties of corn gluten feed and corn gluten meal. When you leave college and start milking your own cows you can build up a safe, productive ration right at the start, with none of the costly and profitless experimenting that many a self-educated farmer has undergone.

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AND
EVERY GOOD DAIRY RATION



23% Protein



40% Protein

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New York Chicago

When it comes to using the machine after it is purchased the one operating it needs to remember that the nozzle should be adjusted according to the height of the pile of the rug. A machine with the nozzle set too high will run easily but do little work, as the air simply rushes into the nozzle above the surface of the rug, instead of tending to pull through the rug, bringing the dirt with it. A nozzle that is set too low may mean one that is "choked," that is, the air is hindered or prevented from entering the machine and consequently no work is accomplished. It is a distinct advantage to have the front wheels set back behind the nozzle so that the nozzle may be run along close to and parallel with mopboards or edges of furniture.

Since the dust bag must be removed frequently, it is necessary that it should be easily removed and replaced, and at the same time, be securely enough fastened so that there is no danger of its coming off at the wrong time. Nor should the dust leak through where the connection is made. The dust bag itself should be well made and firm enough to prevent leakage of dirt, and yet not so firm that the air is retarded in its passage through it.

Many of the machines weigh somewhere around eleven to twelve pounds. The woman who must carry her cleaner up and downstairs frequently is surely interested in having as little weight as is possible in a good machine. The attachments are of much the same type in all of the cleaners being discussed here. They should connect easily with the fan chamber in such a way that suction is not lost but the full force of it directed through the attachment in use. Direct connection to the fan chamber is now made in most of the machines. If a salesman man refuses to demonstrate attachments, it is likely to be because, for some reason, the suction is weak. Using attachments seems to be largely a matter of habit. In the past they have been bought and used repeatedly, or else almost never used.

There are other points which good cleaners have in common, such as convenient arrangements for turning on and off the switch, good length of cord and some easy device for caring for the cord when one is through using the machine. Don't expect one to be noiseless, but remember it is singing a song of cleanliness instead of being a mere racket.

Many people purchase good machines and then fail to get the results rightfully expected because they do not understand the construction and operation of this comparatively simple device. It pays to listen to all the salesman says as he explains the machine and its operation. Underscore all he says about the proper oiling of the machine, and listen to the hum of satisfaction of the motor when it is given the right kind of oil. Pennies, pins and similar objects can be picked up by a cleaner, but it is an unwise practice. As these are being quickly thrown around the fan they may chip off pieces of the fan blades and this would lead to uneven swinging or balance and wear on the bearings. Pins may also punch holes in the dust bag. Use a carpet sweeper for this type of litter, instead of doing tricks with your cleaner.

So far, only electric cleaners have been mentioned; however, the woman who has no such power can have a vacuum cleaner of her own. There are now on the market hand-power ones that can really clean, and ones that are easily operated. Many vacuum cleaners lessen the bogey of the awful upheavals known as spring or fall house-cleaning!

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ideas and to see old friends at

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they come anyhow. But the College would like to ask them
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Volume V

Ithaca, New York, December, 1923

Number 3

MEN, MAIDS, AND MUSIC, MAKE A SNAPPY AG DANCE

Two Popular Professors Involved in Punch Plot at Fall Footwarming

The second informal gathering of the year was held in the Old Armory, November 16, under the auspices of the Ag Association. Along about 8:30 signs of abnormal activity about the building were evident, and an hour later the party was in full swing with the men doing most of the swinging. An all-important little card stating that the bearer was a member of the Ag Association proved by far the easiest way of admission, since no tickets were sold at the door. The door-keeper was an ex-pugilist whose privileged friends were not, a rare find in these days of bootleggers and bribery.

Stags Abundant

As the number of male devotees of the terpsichorean art far exceeded the available supply of women, although contrary to the current practice, stags were admitted throughout the evening. These indispensable gentry early took possession of the center of the floor from which strategic position sudden sallies into the ranks of the dancers were discreetly indulged in. Around them flowed the stream of dancers, each couple moving in perfect coordination with the music under the spell of the indescribable intoxication of the dance.

What Happened to the Punch

Over four hundred of the elect saw fit to attend. About 12 o'clock most of those with "light fantastic toes" became weary and the orchestra was sent home. The only faux pas of the evening was made some fifteen minutes after the dance was over when a committeeman bent upon a tasteful inspection of the punch attempted to open the door leading into the room in which the refreshments were kept. The door was evidently locked. Several lusty knocks failed to produce visible results so, taking a key from his pocket he rattled it in the keyhole whereupon the door swung open a foot or so disclosing a brilliantly lighted interior. Framed in the open space stood "Doc" Maynard, a social tea biscuit clutched tightly in his left hand, an expression of indecision mingled with surprise playing over his face. The student, taking in the situation at a glance, was about to withdraw with murmured apologies when suddenly the stentorian voice of Professor Savage boomed a hearty "Come on in." Thus bidden he entered and found the speaker astride a convenient milk can enjoying a glass of punch. Explanations were offered and allowed to pass unchallenged by a wink until Doc "wished he had a pail with which to rush the growler," whereupon Professor Savage produced a collapsible cup from an inside pocket. A quarter of an hour later



DR. JAMES M. SHERMAN

New head of dairy department who is to take charge December first

an empty cracker box and a milk can from which the last cupful of punch had been drained, were all that remained—deserted monuments to the gastronomical attainments of two professors and a student. All of which goes to show that professors are exceedingly human after all.

Much credit is due to "Bob" Wendt '24, and John Gilmore '24, for the successful management of the dance, and to Blackmore's orchestra who were the purveyors of the music.

A committee composed of beribboned welcomers headed by "Don" Ries '25, made the frosh and short course men feel at home and added much to the general decorativeness of the hall.

The presence of the Meses. E. S. Savage, L. A. Maynard, and P. W. Claassen as patronesses added materially to the enjoyment of the occasion.

BRAND NEW SECRETARY TO GRACE DESK IN DOMECON

Miss Dorothy Matteson, of Mt. Vernon, New York, has been appointed domecon's new secretary. Miss Matteson received her B. S. in 1918 and her M. A. in 1922 from Teachers' College at Columbia. For two years she taught home economics in the Scarborough School at Scarborough-on-the-Hudson, a school started a few years ago by Frank A. Vanderlip to experiment with theories of education and teaching as worked out at Teachers' College. Before going to Scarborough, Miss Matteson taught clothing at the State Normal School in Kalamazoo, Michigan, and previous to that she taught home economics in the City Normal School in Bridgeport, Connecticut.

TOOL-SHED SCENE OF OUR ANNUAL BATTLE OF WITS

Farm Practice Frosh Find Much of Interest for Uninitiated

The tool-shed on the College farm presided over by Professor A. C. King of the department of farm practice is the stamping ground for many anxious frosh these days. The department is finding out just what practical experience the entering class has with pitchforks, plowshares, and poultry, and the like while farming a backyard in Hoboken, Oil City, or Varna.

The neophyte upon entering the tool-shed is introduced to a bewildering array of live stock and farm machinery. In one corner of the shed stands a wise old horse, evidently a senior, near a harness peg. His hopes of getting out into the field and working, rise and fall as the new students attempt to harness him with varying degrees of success. Occasionally he heaves a sigh of relief or more appropriately sighs a heave of relief as an awkward students fails to "hitch old dobbin to the shay."

Just One Thing After Another

Next to the horse are eight crowded pens of poultry, which being resigned to their fate, submit without a squawk to the frosh who is trying to trace out their family tree. Round the corner from the chickens stands "the foster-mother of all the race" as "Bob" Adams of rural rhyme fame dubbed the patient cow. She, too, is an expert in the art of driving the hardworking frosh to the use of words exclusively (?) masculine. To have one's frosh cap unceremoniously switched from his head and sent floating across the room or perchance draped artistically atop one or the other of the malefactor's abbreviated horns, is an experience which as one of the newcomers thus separated from his customary regalia, aptly put it, will not bear repetition.

The farm tools and products are even more in evidence. The student is directed to boxes of apples and pears and invited not to help himself but to tell for what famous men they were named. Different parts of a gas engine call for wild speculation while a large array of bottled seeds cause the frosh to wonder where he has met them before.

GIRLS GATHER

The November meeting of Frigga Fylgae was held in the Frigga Fylgae room on November sixteenth. Sadie Adelson '24, has charge of the refreshments for each meeting. Gladys Bretch '24, as publicity chairman, is arranging a competition for posters to be used to announce meetings and other activities.

AG COLLEGE PUBLICATIONS PROVE POPULAR IN STATE

Enough Mailed As Result of Requests to Form Line Six Miles Long

October was a normally busy month for the publications office. Approximately 49,000 pamphlets on subjects varying from clover culture to ditch digging passed through the mailing room in response to individual requests from those who would have a leaf or two from the tree of knowledge in all parts of the state. Under the competent eyes of Mrs. Edith Sherwood, mistress of the mailing room, 22,298 mail and 1,487 personal requests were answered in a thoroughly efficient manner. Fifteen sacks, bulging with reading material, were not an unusual welcome for the overworked mailman into whose hands were delivered in a single month enough pamphlets to make a walk three feet wide from the Ag barns to "Davy" Hoy's office over in Morrill Hall, or if placed end to end in a single row to reach a distance of six miles.

New Bulletins

Among the recent additions to the list of bulletins put out by the College are: Experiment Station Bulletin 420, "Three Little-Known Clovers," and 424, "Studies of Various Factors Influencing the Yield and the Duration of Life of Meadow and Pasture Plants;" Memoir 70, "The Inheritance of Blotch Leaf in Maize;" and reprints of Farm Reading Course Lesson 157, "Feeding for Egg Production;" and 133, "Preparation of Eggs for Market;" and Home Reading Course Lesson 87, "The Decorative Use of Flowers."

SHORTHORN REGISTRATION DROPS A BIT THIS YEAR

The College is temporarily enlarged by the entrance of 226 short course students. This brings the total registration in the Ag College to 1320—there being 1095 regular students already in attendance.

Each of the six Indian Nations of this State, the Oneidas, Onondagas, Senecas, Cayugas, Tuscaroras and Mohawks are again represented by students who expect to take back the latest information regarding farm practices to their tribes.

This year there are 25 fewer students than last year, a condition which is true in short course enrollment throughout the country and seems to reflect agricultural conditions.

NEW GROUNDS FOR POSIES

During the summer the department of floriculture and ornamental horticulture has been actively engaged in moving the experimental gardens to the new site on the Varna road across Fall Creek, opposite the rifle range. The rose, iris, and peony gardens are now planted and work on the bungalow and greenhouses is nearing completion. When the gardens are finally completed this will be one of the most attractive spots in the vicinity.

DO YOU REMEMBER—?

Do you remember how you used to go walking out Forest Home walk on Sunday afternoons, with Her, perhaps, at your side? And perhaps you stopped to gaze at the shining surface of Beebe Lake. Ah! That was it! You called it Beebe "Lake."

We call it Beebe Flats, for it isn't a lake any more; not in the true sense of the word.

The dictionary defines "lake" as a body of water entirely surrounded by land. But Beebe isn't a body of water—it's a conglomeration of puddles among fast-rising mounds of rock, gravel, and plain mud sediment.

During the past few years the rush of water over the creek bottom about the "Lake" has carried with it all sorts of dirt and rubbish. Entering Beebe, the current has slowed down, lost its carrying power, and deposited its load on the rising bottom.

Next winter, perhaps, we shall go scooting along in our toboggans over the slick ice, and hit a protruding sand pile or gravel bank.

CLASS DIGNITARIES CHOSEN ELECTIONS WELL CONTESTED

The rustle of papers, at least of nomination papers, seemed especially noticeable this year, as if welcoming the political maelstrom into which the Ag college was plunged on Oct. 23. Rumors were about that there was much underhanded work carried on during the nominations, not the least of which was the triple duplication of signatures which appeared on some of the sheets. The prize, however, goes to the man—doubtless a frosh—who signed nominations for all four classes, not even trying to disguise his handwriting during the process.

When the smoke of the election day battle cleared, and the last dark horse had been put to flight, the count showed that the heroes of the day were the following: Class of 1924—President, Don J. Wickham; Vice-President, Florence Opie; Secretary and Treasurer, Victor Crowell. Class of 1925—President, William Flanagan; Vice-president, Janet Watson; Secretary and Treasurer, James Reeves. Class of 1926—President, Leland Ham; Vice-president, Geraldine Tremaine; Secretary and Treasurer, Calvin Russell. Class of 1927—President, John Lonwood; Vice-president, Marion Rogers; Secretary and Treasurer, Richard Eglinton.

THOMPSON IN OHIO

Professor H. C. Thompson, head of the department of vegetable gardening, is spending his three months' vacation in graduate study at Ohio State University, where he will get his M. S. degree at the beginning of the new year.

EXTRA! JANITOR UNEARTHS RARE GROUP OF ANTIQUES

Ancient Jugs Found in East Roberts Contents Perfectly Preserved

"The life of an Ag janitor is not without its ups and downs," claims Flaveous A. Smith, hardworking handyman for the COUNTRYMAN office and adjacent properties. Upon the removal of the dairy department to new quarters Flaveous was instructed to make way with sundry bottles, jugs, and cans which had accumulated on several little-visited shelves on the third floor of East Roberts Hall. After removing three wash-tubs full of miscellaneous glassware, a number of suspicious-looking jugs were uncovered, which upon a cautious investigation tastefully indulged in, proved to contain hard boiled cider of a kind generally believed to be extinct. Side kicks in the way of long-necked bottles filled with ancient grape juice were also brought to light and sampled with potent and gratifying results. A number of needy students of an analytical turn of mind appeared from nowhere, but quick work on the part of the janitor spirited away the liquors to a safe hiding-place which even the most careful search failed to reveal. Departmental feeling in the matter is at a high point, and accusations of home brewing have been proved and disproved with amazing ingenuity. In the meantime the Janitors Club has fallen heir to the stuff and as Flaveous aptly remarked when interviewed, "A jug a day keeps the janitors at play, and we'll not give it up, no not by a jugful."

MANY MOTHERS MAKE LIGHT WORK OF DOMECON DUTIES

The second quota of domecon seniors have entered the apartment and the lodge. Miss Roberts is again in charge of the lodge, and Bobby has returned. Bobby is now seventeen months old and is beginning to walk and talk. He has reached the stage in his development when it is fascinating to watch him. Dolly Brause, Elva Campbell, Gertrude Jordan, Margaret Kelly and Lois Smith will be his mothers for the next five weeks.

Edna Mae Domecon, aged six months, is under the charge of Miss Fenton in the apartment. Edna Mae has brown hair and large blue eyes, and while she is unable to compete with Bobby in the line of talking, she can make many and considerable sounds. Hortense Black, Marion Dammeyer, and Ada Jones are at present her "domecon mothers."

OMICRON NU INITIATES

The Cornell Chapter of Omicron Nu initiated five members November the tenth. Initiation was in the Riskey organization room and the banquet at Forest Home. The speakers were Hortense Black '24, toastmistress, Dean G. White, dean of women, Professors Martha Van Rensselaer and Flora Rose, Assistant Professor R. M. Kellogg, Frances Scudder '24, chairman, and Martha Kinne '24 who made the response for the initiates.

THIS 'ERE**SQUIRRELS IN SEASON**

As publicity manager for the dairy congress, B. A. spent money like a drunken sailor and dictated policies to the president of the United States. As a result he is getting pretty cocky.

One morning not long ago he appeared at Fernow Hall out of breath and in a bright red hunting shirt plus a nice fat squirrel. You see, he was afraid of being late, but it still lacked forty minutes of eleven so the joke was on him.

Now is the time for every man to pick up a "Sage Hen" or two for Christmas dinner.

Widow compet to a frosh: "How about your widow?"
Frosh: "Huh, I ain't dead yet."

The present women's editor has always been an asset to this publication.

Last month she wrote an editorial, she has written many before but to this one she forgot to sign her name. When one of the scrub editors read it over he made this comment: "Well written, but pretty knocky. Who?"

A day later he found written below his remark something like this:

"Sorry not to have initialed. Also that you think it knocky but one must knock to get in!"

She did.

You come and see us some time.

THAT 'AIR**ADAM AND NOAH**

"We are like two tribes of monkeys that want to monopolize the same banana patch,"—but, yes, we have no patch of the darned things, Professor Needham, even though we may be like the monkey by original nature. The fruit for which we humans strive is quite universal and prolific, for a recent investigation shows that neither Adam nor Eve was hungry enough to eat the seeds.

Have you a little fairy in your home? No, but I have a little miss in my engine.

New York State Co-Operative Poultry Certification Association Inc.

The Association formed to carry on the work of Poultry Certification as begun by the Poultry Department of the College.

Members of this Association have for sale the following: 2,000 certified hens, 100 Certified cocks, 1,000 Certified cockerels, 1,400 selected cockerels, and 4,000 pullets. Write for free sales list.

Free catalogue ready for distribution about January 1, 1924. Describes "Certification," gives list of members, variety of birds represented, and other information.

See our booth at the Production Poultry Show, Ithaca, N. Y., December 4-7, 1923.

Production Bred Poultry

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Published on the first of each month during the school year by THE CORNELL COUNTRYMAN, Inc. Contributions should be in the hands of the Editor by the fifteenth of the month previous to the date of issue. Say what you want and sign it, indicating whether you want your real name used, or another one.

"GARD" BUMP
"SI" CROSSMAN } Editors

Vol. V December, 1923 No. 3

PROFESSORIAL HABITS

When you come to think of it, a habit's a habit and that's all.

If you wear your hat cocked a little to the left, and you like it, and someone tells you that you look good that way, you will, in all probability, wear it that way again and again until it becomes a habit with you and soon your friends, and enemies, are able to identify you by it.

That's one thing; here's another. Did you ever notice that most of your professors have habits about the courses which they conduct? Of course you have. Professor E. X. Act is so strict about attendance that he makes every student feel that he is back in the district school. That's bad.

Professor R. E. Ding insists upon so much reference reading that it appears unreasonable, and consequently little or none of it is done. That's too bad.

Professor Ramb talks thru his nose, never thinking that his mouth could be used for that purpose. That's the limit!

These are mostly habits formed many years ago by some it is true, but no matter how late, new habits really can be formed if one will persevere. You believe that and so does Professor Kruse of the department of rural education and in his new course in educational psychology he will show you how if you will but give him the chance.

It is to be regretted, however, that the Professor has not seen fit to extend an invitation to the members of the faculty of other colleges. Please, Professor Kruse, help them too. Hire a hall if necessary; the student body is behind you.

THE DAIRY STORE

The removal of the dairy store to new quarters in the new Dairy building is a much-talked-of matter. Certain is it that the business which the store now has would be greatly reduced. Between classes, students find it convenient to drop around to the old Dairy building for a drink of milk or a dish of ice cream. And

even at that less than 3 per cent of the students passing thru the Ag quadrangle avail themselves of the opportunity. Granted that seasons vary and that the 3 per cent changes with the seasons, yet it represents a fair average for the college year. The new Dairy building is more than a quarter of a mile from the Ag quadrangle. It is not the custom these days to walk that far for an ice cream cone, especially if the weather be a bit cool. There are not as many people passing the proposed location as are served on a warm day in the present quarters. If we are to have a dairy store at all—and the need for one is obvious—why bury it in the furthest corner of the campus? Leave the store where the crowds are and give it room to grow!

SOCCER

At the last moment before going to press we are still unable to give our readers the finals on the inter-collegiate soccer championship. We hope none will be in suspense for the outcome is obvious. Ag teams never have winning streaks.

To date the college team has played six games, four of which it won and in each of the other two neither side scored. The scores are as follows: Ag—4, Arts—0; Ag—1, M.E.—0; Ag—2, Vet—0; Ag—1, Law—0; Ag—0, Chem—0; Ag—0, C.E.—0. Since Architecture preferred to default the team has a total of five games to its credit.

The old pep is not lacking. We will have an opportunity in a few weeks to demonstrate similar enthusiasm on the basketball floor.

KERMIS

The Kermis play was a decided success last year. Many plays were written for the competition, and more than 60 regular and short course students competed for places in the cast.

At the present writing it is impossible to tell just how many plays will be submitted this year, but the more the merrier. Every student who can talk above a good-sized whisper is expected to turn out for the cast competition. The funnier your face and the more outlandish your build the better chance you will have. Don't be self-conscious or class conscious. Any man or woman in the College of Agriculture is eligible.

APPRECIATION

The old "toboggan slide," which the Ag students from the west side of the campus have had to scale for many winters, is being replaced by a fine line of steps leading to the side entrance of the new Chemistry Laboratory. If the wintry blasts will hold off long enough for the workmen to get the mud dried up and the cement hardened, the Ag students will not have to worry how they are going to land when sliding down the rough incline, they are ungraciously tripped up by an old bit of board or spike that once, many ages ago, was a part of a step.

IN PASSING

The average man, when he attends a theatrical performance, is naturally interested only in that part of the performance which is presented on his side of the curtain. And when the play is over, then in a large measure, all is forgotten—especially the man and men behind the scenes.

Professor W. A. Stocking, the man behind the scenes in all of the activity connected with the new Dairy building, deserves all of the recognition and thanks possible for the realization of our long sought ideal—a well-equipped dairy building. In a large measure, the completion of the building was made possible, or at least, hastened forward by Professor Stocking's efforts. Let us not forget the man who for many years has been the leader of the Dairy department and whose efforts have now put the department on a new working basis, and have led it to a place where the outlook for the future is very bright.

The man who will succeed Professor Stocking, as leader of the dairy department, is Dr. J. M. Sherman, recently of the Department of Agriculture at Washington. Dr. Sherman can well be expected to carry on the good work which has been started. It is expected that the larger part of his time will be taken with research work, a phase of dairy work of prime importance. We are looking for big developments, and strides in the dairy department.

SPOONS

For two months we have been urgently requested by members of the staff to say something to you about spoons. It seems that they are a disgrace and tend to discredit the Ag campus. When one thinks it over one is bound to admit of the justice of such a statement.

The short course students are now with us and we must exert every effort to set them a good example. So, the next time you buy ice cream of the dairy department, do not throw the spoons about the campus, please.

OUR RESPONSIBILITY

The short course students are again busy among us. They have taken their important place in the student life and in college activities with unusual facility. It is the duty of every regular student to assist in the orientation of these new arrivals and it is their duty to demand such a service of us. Welcome, fellow students, and success attend your efforts!

WELCOME

To Dorothea Matteson, new secretary for the school of home economics, we extend a hearty welcome. We have not yet had the opportunity of an interview with Miss Matteson, but, if previous associations reflect character, we judge her to be quite direct. She was at one time teacher of clothing in the state manual school at Kalamazoo.

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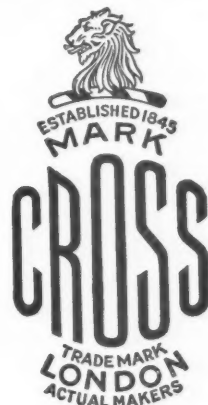
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BARTENDERS AFTER POINTERS ON PROFESSION IN NEW YORK

Eight upperclassmen and one sophomore in the hotel management course were guests of the United Hotels Company at the International Hotel Congress and the Eighth Annual Hotelmen's Exposition at the Grand Central Palace in New York on November 20, 21, and 22. The exposition and congress brought together the most representative group of hotel men the ever met at one time, bringing delegations from nearly every European country, including Egypt and Japan.

Besides attending the exposition, the students took several short trips, arranged for the class by Brigadier-General J. Leslie Kincaid, vice-president of the United Hotels Company. On one of these trips they visited the Pullman headquarters at Harmon, N. Y., where they were shown the Pullman system of dining car service. They were also taken aboard an ocean liner to observe the method of service on such a ship.

The men who attended the exposition were J. M. Dockery '24, A. W. Dunlap '24, J. Courtney '25, J. M. Crandall '25, C. L. Hanlon '25, C. A. Jennings '25, A. L. Olsen '25, H. J. Marchand '25, and E. A. Wright '26. They were entertained at the Robert Treat Hotel in Newark, New Jersey.

The fellows enjoyed their trip immensely, but report one dark moment. That was when a prominent American hotel manager took them for a bunch of Russian delegates. What was his surprise when they indignantly informed him that they were not Bolsheviks, even though they hailed from the wilds of Ithaca!

EGGS MEET AT JUDGMENT DAY

The second annual poultry and egg show will be held in the animal husbandry Judging Pavilion on December 4, 5, 6, and 7. The poultry department, with the cooperation of the New York State Poultry Council and the New York State Farm Bureaus, is planning to make this the biggest and best poultry show ever held in the state.

Besides the educational displays and exhibits, Professor J. E. Rice will give several lectures on breeding and selecting fowls for egg production. The demonstration judging will be done by members of the poultry department, who will award the prizes to the winning exhibitors.

MORE MONKEY BUSINESS

"We are like two tribes of monkeys that want to monopolize the same banana patch," said "Doc" Needham in his talk on "War as a Biological Factor," given before the Cosmopolitan Club on November 2. Doc believes man is a fighting species by nature and war is primarily due to his inherited animal instinct which is all too often uncontrolled. After having progressed from the clan, thru the tribal stage to the national group, he is still fighting his neighbor because of his failure to substitute a broad attitude of internationalism in place of his present nationalistic inclinations.

It is with sincere regret that announcement is made of the death of Arthur H. Taylor, a sophomore in the college, at the Infirmary on October 28. As a student he exhibited at all times unfailing regard for those principles upon which honor and integrity are built. No higher tribute can be paid those sterling qualities which he possessed than to note that his friends were legion, his ideals high, and his face always to be found where there was work to be done.

COW FOOLS PROFESSOR SELECTS OWN SUITOR

Brodhead Aleida, a beautiful young Ayrshire lady, residing at the animal husbandry department, upset her guardian's plans for her marriage to a well-bred Ayrshire gentleman by breaking down the conventional barrier of a barbed wire fence and eloping last week with one of the boys of the Holstein family.

Prof. "Charlie" Allen was shocked and nearly overcome when he learned that his ward had eloped. His extensive arrangements for her marriage in the aristocracy and provisions for the future progeny were completely upset.

One reason which has been assigned for the elopement with young Holstein is that Brodhead Aleida, after hearing a great deal of gossip in the animal husbandry department, was curious to prove the veracity of Mendel's Law to her own satisfaction.

KAMPUS KOLLOQUIALS

Professor L. H. MacDaniels, of the pomology department, and Professor E. V. Hardenburg, of the vegetable gardening department, attended the agricultural exhibits at the state school of agriculture at Alfred during the week of November 12.

John Paul Jones of the botany department has accepted an assistant professorship at the Massachusetts State Agricultural College, Amherst, Mass. H. H. Clum, formerly of the same department, is instructing in botany at the University of Michigan.

We are glad to have Professor G. W. Herrick of the entomology department with us again after an illness of nearly two months' duration. An attack of appendicitis necessitated an operation, from which he has fully recovered.

TWO OF A KIND

The engagement of Miss Madeline Weillbrenner of Schenectady to Jim Davis '24, popular president of the Forestry Club, was announced to the waiting world on November 13.

W. B. MacMillan, assistant in forestry, and Miss Elizabeth R. Beeler of Chicago, Illinois, announced their engagement on November 5.

MONEY IS TO BE GIVEN AWAY TO THOSE WHO SPEAK FOR IT

The first tryouts for the fifteenth annual Eastman Stage will take place on December 3, in Roberts Hall at 7:30 o'clock. Over thirty Ag students, representing all classes have signified their intention to be there with three-minute speeches and some excellent gabsters doubtless will be brought to light. From this group fifteen of the more talented speakers are to be selected for a second tryout to be held in the same place two weeks later, at which time they will talk on some subject suitable for presentation before a Farmer's Week audience. The final contest will be held on the Thursday of Farmer's Week at which time the successful speaker will receive a prize of \$100. A second prize of \$20 goes to the runner-up in the contest.

The stage was endowed five years ago by Mr. A. R. Eastman who died on August 28, at Waterville. The endowment makes it possible for the stage to survive its founder and to carry on the excellent work so ably fostered by him.

COLLEGE SHOWS 'EM AT SHOW

Under the broad roof of the Grand Central Palace, New York City, on November 3-10, the Eastern States Apple Exposition and Fruit Show held forth. People squeezed, pushed, and crowded from one booth to another gazing at the wonders of the fruit world, and leaving, we hope, a little bit happier with the thought that "An apple a day keeps the doctor away."

One of the many attractions was the canned fruit exhibit in charge of Professor Lucile Brewer who was kept busy distributing recipes and talking with people interested. The department of pomology in its most inimitable style, under the direction of Professor G. W. Peck and J. Oskamp, showed mostly by the means of photographs what the college is doing for the fruit industry. The beekeeper's conference, which was held at the same time, was in charge of Professor R. B. Willson of the Extension department.

HOSPITABLE HOSTS

Ye Hosts, the social organization of all students specializing in hotel management, proved to those assembled in the Home Economics building on the evening of November 7, that it was not so named in vain. The occasion was the first get-together of students and faculty this year and the usual platitudes were in order. Dean A. R. Mann and "Doc" Betten spoke briefly on the history of the department and the choosing of a vocation, after which Mr. H. B. Meek outlined the aims of the course, past, present, and future. Following the talks, pressed apple juice, properly aged, and domecon doughnuts, distributed with an eye to the individual capacities of those present, was productive of an atmosphere of satisfied contentment, in which blissful state of mind the hosts, sensing the near approach of 11 o'clock wended their way homeward and to bed.

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The drawing prepared for reproduction should be on good white drawing paper and drawn with black India ink. It should be about twice the size that the finished plate is to be, so that when it is reduced to the smaller size the lines themselves will be reduced in thickness, crudities in the original minimized, and the whole effect made more pleasing.

Care must be taken to have every line in the drawing really black. Fine lines, if grey, have a tendency to disappear altogether. As much care should be taken in preparing the drawing as the engraver exercises in reproducing it.



A Line Engraving

A simple outline of the process follows: A photographic negative of the drawing, reduced to the required size, is the first operation. This negative is made on a special plate which the engraver himself prepares in the dark room as needed. A lens is used for this work which is constructed for this particular purpose. Powerful arc lights are used for illumination.

This negative is printed photographically on polished zinc 1/16" in thickness, which has been rendered sensitive to light by a coating of bichromated albumin. The lines thus transferred to the zinc are rendered impervious to acid, while the bare zinc between the lines is easily attacked by the acid and is etched or eaten away in an acid bath leaving the lines standing in relief. The process of etching requires some time, as it is necessary from time to time to dry the plate, and brush a resinous powder against the sides of the lines to prevent the acid cutting under same.

When the etching process is completed the plate is trimmed and mounted on a specially-seasoned wood base, type high. Proofs are made for comparison with the original and the plate is ready for the printer.

Details of operation are omitted here for lack of space, but about fifty operations are required to make a "zinc," everyone of which must be performed with the utmost accuracy to insure a perfect reproduction.

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Next month we will tell about "halftones."

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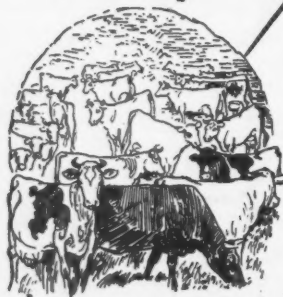
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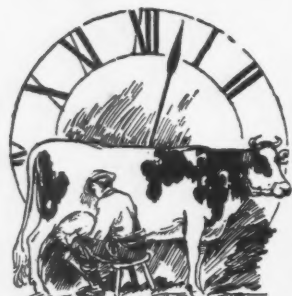
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